

We claim:

- 1           1. An ankle gapping device comprising:  
2           a lower leg engaging apparatus;  
3           a foot engaging apparatus; and  
4           a biasing member disposed between said lower leg engaging apparatus and said foot  
5           engaging apparatus to bias said lower leg engaging apparatus and said foot  
6           engaging apparatus away from each other.
- 1           2. An ankle gapping device according to Claim 1, wherein said biasing member is  
2           pneumatic.
- 1           3. An ankle gapping device according to Claim 2, further comprising an air pump  
2           coupled to provide compressed air to said pneumatic biasing member.
- 1           4. An ankle gapping device according to Claim 2, wherein said biasing member includes  
2           an inflatable tube.
- 1           5. An ankle gapping device according to Claim 4, wherein said inflatable tube is shaped  
2           as a sectioned torus.
- 1           6. An ankle gapping device according to Claim 4, wherein said inflatable tube is adapted  
2           to generally surround an ankle, and includes a break to facilitate positioning around said ankle.
- 1           7. An ankle gapping device according to Claim 1, wherein said foot engaging apparatus  
2           includes a receiving portion adapted to accept said biasing member.
- 1           8. An ankle gapping device according to Claim 7, wherein said receiving portion  
2           includes a channel formed in a top portion of said foot engaging apparatus.

1           9. An ankle gapping device according to Claim 7, wherein said receiving portion is  
2 substantially rigid.

1           10. An ankle gapping device according to Claim 1, wherein said foot engaging apparatus  
2 comprises a first surface adapted about a dorsal portion of a foot.

1           11. An ankle gapping device according to Claim 10, wherein said foot engaging apparatus  
2 comprises a second surface adapted to abut a heel.

1           12. An ankle gapping device according to Claim 11, wherein at least one of said first and  
2 second surfaces is arched.

1           13. An ankle gapping device according to Claim 12, wherein both of said first and  
2 second surfaces are arched.

1           14. An ankle gapping device according to Claim 11, wherein:  
2 said first surface is on a first portion of said foot engaging apparatus;  
3 said second surface is on a second portion of said foot engaging apparatus; and  
4 said first portion of said foot engaging apparatus is flexibly coupled to said second  
5 portion of said foot engaging apparatus.

1           15. An ankle gapping device according to Claim 14, further comprising a hinge  
2 connecting said first portion of said foot engaging apparatus to said second portion of said foot  
3 engaging apparatus.

1           16. An ankle gapping device according to Claim 14, comprising a securing device for  
2 securing said first portion of said foot engaging apparatus to said second portion of said foot  
3 engaging apparatus about said foot.

1           17. An ankle gapping device according to Claim 1, wherein said leg engaging apparatus  
2 includes a receiving portion adapted to accept said biasing member.

1           18. An ankle gapping device according to Claim 17, wherein said receiving portion  
2 includes a channel formed in a top portion of said leg engaging apparatus.

1           19. An ankle gapping device according to Claim 17, wherein said receiving portion is  
2 rigid.

1           20. An ankle gapping device according to Claim 19, wherein said receiving portion is  
2 flared sufficiently to contain a top portion of said biasing member.

1           21. An ankle gapping device according to Claim 1, wherein said leg engaging apparatus  
2 is formed of material sufficiently rigid to transfer force exerted by said biasing member to a  
3 lower leg of a user.

1           22. An ankle gapping device according to Claim 1, wherein said leg engaging apparatus  
2 is tapered from an upper portion to a lower portion.

1           23. An ankle gapping device according to Claim 22, wherein said leg engaging apparatus  
2 is contoured to conform a human lower leg.

1           24. An ankle gapping device according to Claim 1, wherein said leg engaging apparatus  
2 is sectioned to facilitate application and removal.

1           25. An ankle gapping device according to Claim 24, wherein said leg engaging apparatus  
2 includes at least two sections.

1           26. An ankle gapping device according to Claim 25, wherein said at least two sections  
2 are flexibly coupled together.

1           27. An ankle gapping device according to Claim 26, wherein said at least two sections  
2 are flexibly coupled together by a hinge.

1           28. An ankle gapping device according to Claim 26, further comprising a securing  
2 member adapted to tightly secure said at least two sections about said leg.

1           29. An ankle gapping device according to Claim 28, wherein said securing member  
2 comprises hook and loop fastener material.

1           30. An ankle gapping device according to Claim 25, wherein said leg engaging apparatus  
2 comprises a semi rigid elastic wrap.

1           31. An ankle gapping device according to Claim 1, wherein:  
2           said foot engaging device defines a seat formed to accept a bottom portion of said  
3           biasing member; and  
4           said leg engaging device defines a seat formed to accept a top portion of said biasing  
5           member.

1           32. An ankle gapping device according to Claim 31, wherein said biasing member is an  
2 inflatable tube.

1           33. An ankle gapping device according to Claim 1, wherein said biasing member is  
2 capable of exerting a force sufficient to cause separation of an ankle joint.

1           34. An ankle gapping device according to Claim 1, wherein said lower leg engaging  
2 apparatus comprises means for engaging the lower leg of a human being.

1           35. An ankle gapping device according to Claim 1, wherein said foot engaging apparatus  
2 comprises means for engaging a human foot.

1           36. An ankle gapping device according to Claim 1, wherein said biasing member  
2 comprises means for pushing said lower leg engaging apparatus and said foot engaging apparatus  
3 apart from one another.

1           37. A method for gapping an ankle joint, comprising:  
2           applying a foot engaging apparatus to a person's foot;  
3           applying a leg engaging apparatus to the person's leg;  
4           disposing a biasing member between said foot engaging apparatus and said leg  
5           engaging apparatus; and  
6           actuating said biasing member to urge said foot engaging apparatus and said leg  
7           engaging apparatus apart from one another.

1           38. A method for gapping an ankle joint according to claim 37, wherein said step of  
2 applying said foot engaging apparatus to said foot includes positioning a first portion of said foot  
3 engaging apparatus on a dorsal side of said foot and positioning a second portion of said foot  
4 engaging apparatus on a heel of said foot.

1           39. A method for gapping an ankle joint according to claim 37, wherein said step of  
2 applying said leg engaging apparatus to said leg includes wrapping said leg engaging apparatus  
3 around the lower leg.

1           40. A method for gapping an ankle joint according to claim 37, wherein said step of  
2 disposing said biasing member between said foot engaging apparatus and said leg engaging  
3 apparatus includes positioning an inflatable tube between said foot engaging apparatus and said  
4 leg engaging apparatus.

1           41. A method for gapping an ankle joint according to claim 40, wherein said step of  
2 actuating said biasing member includes pumping fluid into said inflatable tube.

1        42. An ankle gapping device comprising:  
2            lower leg engaging means;  
3            foot engaging means; and  
4            means for pushing said lower leg engaging means and said foot engaging means in  
5            opposite directions.